2003 CBECS National Average Source & Site Energy Use and Design Targets by Space Type[1]						August 2006
Building Use Description[2]	**Average Source EUI[3] (kBtu/sqft)**	**Average Percent Electric**	**Average Site EUI[3] (kBtu/sqft)**	**Energy Reduction Targets: Source EUI (kBtu/sqft)[4]**		
				50% Reduction (better than average)	**60% Reduction** (better than average)	**70% Reduction** (better than average)
Self-storage	10.9	44%	4.0	5.5	4.4	3.3
Religious worship	77.5	52%	45.9	38.8	31.0	23.3
Distribution/shipping center	82.9	61%	44.2	41.4	33.2	24.9
Vehicle repair/service/storage	96.6	64%	50.7	48.3	38.6	29.0
Post office/postal center	131.9	58%	63.5	66.0	52.8	39.6
Fire station/police station	145.7	56%	77.9	72.9	58.3	43.7
Preschool/daycare	155.3	60%	75.0	77.6	62.1	46.6
Retail store	158.3	67%	72.2	79.2	63.3	47.5
Clinic/other outpatient health	199.0	76%	84.2	99.5	79.6	59.7
Nursing home/assisted living	234.8	54%	124.3	117.4	93.9	70.4
Restaurant/cafeteria	565.7	53%	301.6	282.9	226.3	169.7
Convenience store (with or without gas station)	681.1	90%	241.4	340.5	272.4	204.3
Fast food	1195.0	64%	534.3	597.5	478.0	358.5

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Notes

[1] **Commercial Building Energy Consumption Survey (CBECS),** conducted in 2003, was used to calculate values presented in this table. The data is gathered from the Dept. of Energy's - Energy Information Administration (EIA). These are building types that are not available in the EPA Target Finder.

[2] **Buildings Use Descriptions** are taken from valid building activities as defined by EIA in the 2003 CBECS data. The average Source Energy Use Intensity and Site (EUI) are calculated in kBtu/sqft as weighted averages across all buildings of a given space type in the 2003 CBECS data set; the space type is defined according to the variable PBAPLUS8; the CBECS variable for "More Specific Principal Building Activity". The building use categories each have affiliated codes under the variable defined as PBAPLUS8 in the CBECS 2003 data set.

[3] **Source Energy** is a measure that accounts for the energy consumed on site in addition to energy consumed during generation and transmission in supplying energy to the site. ***Converting site to source energy:***
Source energy values are calculated using a conversion factor for electricity of 1 kBtu site energy = 3.013 kBtu source energy;
a conversion factor for natural gas of 1 kBtu site energy = 1.024 kBtu source energy; and a 1:1 conversion factor for fuel oil and district heat.

[4] **Energy Reduction Targets** represent the percent better than average source energy use intensity (EUI). Source energy use intensity provides a more accurate assessment of primary fuel consumption, thermal efficiency, and greenhouse gas emissions. For this reason striving for the source energy target is a far more accurate measure of efficiency and greenhouse gas reductions. The percent better than average energy reduction targets are calculated by using the EUI (kBtu/sqft) for of an average building and deducting the selected percentage from the average to determine the target EUI.

Explanation of Source energy: The source energy intensity target cannot simply be converted into an equivalent site energy value because different design strategies may yield different fuel mixes. Thus the different fuel mixes translate into the corresponding site to source ratios for the design. It is important to note that reducing source energy by 50% is not always mathematically equivalent to reducing site energy by 50%. For a building design and its components, the associated fuel mix should be used to convert the modeled site energy into the total source energy. The source energy use can then be compared to the values in this table.